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WHY ASTROLOGY DOESN'T WORK^{1,2}

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Summary.—The survival and longevity of astrology has been dependent on an astrological community that will, under no circumstances, allow it to fail. Consequently, a large array of *ad hoc* hypotheses (escape routes) have been marshaled over the years to prevent contrary evidence from being used to confront central tenets of astrology. The result is a closed system with little, if any, empirical grounding. It is further argued that the fit of people to birth charts (horoscopes) lies in several unremarkable, lax rules of astrological interpretation.

[M]ythological explanation is not . . . partial and fallible . . . it elicits unconditional adherence and rejects in advance all possibility of disagreement on the basis of experiment. It persuades the mind that things must happen in a particular way, even if things seem to happen quite differently (Descombes, 1995, p. xiii).

For adherents of a system to claim that the system works, it has to be conceivable that it may fail to work. We can say that an electric razor works because we know what it means for it to fail to work. This example is straightforward. However, consider a slightly more complex example. In the late eighteenth century, Philadelphia had an epidemic of yellow fever. Benjamin Rush, a physician and signer of the American Declaration of Independence, believed he had found a cure. This involved extreme blood-lettings and the administration of a purgative containing mercury (mercurous chloride). Successes were attributed to the treatment but failures (deaths) were explained away in a number of ways. Reuter (1991) gives us some of these excuses: "The patient was already too sick; a careless underling did not properly administer the remedy, the patient was so immoral the gods did not allow a cure" (p. 260). When Rush's own sister and pupils also died after administering his 'cure,' he blamed their deaths on the house being filled with a 'concentrated miasmata' caused by all the patients he had been treating. [Later, George Washington also died as a result of one of Rush's overzealous blood lettings.] Reuter's point here is that once one is convinced of the truth of an idea, one can easily rationalize negative evidence and criticism. Here, 'failings' of Rush's treatment did not lead to a reevaluation of

¹This article is an expanded version of a paper presented at the conference on Science, Pathological Science, and Pseudoscience, at La Coruña, Spain, 1997, Sept. 4-7.

²I give special thanks to Geoffrey Dean for his extensive critical comments on earlier drafts. I also thank J. W. Nienhuys and Karl Pfeiffer for their helpful comments. Address correspondence to Ivan W. Kelly, Department of Educational Psychology, College of Education, University of Saskatchewan, 28-Campus Drive, Saskatoon, Saskatchewan, Canada S7N-0X1.

the system since the 'failings' were not seen as possible signs that there could be something wrong with the treatment. If one does not seriously consider alternatives to one's system and does not consider the possibility that some central parts of the system may be erroneous or need a serious revision, it is very easy to become trapped within the confines of the system. It is even more difficult to think critically about a theory or system when one has invested much time and energy into learning and applying the system; the system provides a source of income and respect; the system is institutionalized and peer feedback supports the system, discourages criticism and provides the individual with a set of built-in alibis for system 'failings' (Caplan, 1994).

It will be argued here that astrology is precisely in this position.³ Let us for the sake of argument make the assumption that astrology is completely false. The pertinent question is: Could astrologers ever find this out? The answer is 'No.' This article explains why.

The theory of astrology, in practice, is like a large rubber glove inflated and sealed at the wrist.⁴ The large glove represents astrology and the smaller fingers represent the ready made excuses available to protect the large glove and prevent it from popping. Any possible "error" in an astrological reading, "inconsistency" between the reading and the life of the client, or a failure to find support for astrology in a research study is analogous to putting pressure on one of the available side fingers. So any external pressure on the main glove (astrology) is absorbed by the fingers (*ad hoc* excuses), and the entire system is never in danger of bursting. The price that is paid for such a closed, unassailable system is that it we will never know whether it provides reliable information about people or only provides a false psychological security. As Magee noted Popper had pointed out, the acceptance of such an airtight system has

the effect of an intellectual conversion or revelation, opening your eyes to a new truth hidden from those not yet initiated. Once your eyes were thus opened you saw confirming instances everywhere: the world was full of verifications of the theory. Whatever happened always confirmed it. Thus its truth appeared manifest; and unbelievers were clearly people who did not want to see the manifest truth; who refused to see it, . . . A Marxist could not open a newspaper without finding on every page confirming evidence for his interpretation of history, not only in the news, but also in its presentation—which revealed the class bias of the paper—and

³The statement that a system 'works' is ambiguous. Astrology 'works' in the sense that clients are satisfied with astrological readings just as clients of palm readers, phrenologists, or aura readers are satisfied. In this article, the concern is with the use of 'works' that implies the theory provides new, relevant information about people that could not be obtained from competing theories (see Dean & Mather, 1994, for more on this distinction). There are many nonastrological reasons why clients and astrologers believe astrology works, and all are consistent with astrology being invalid (Dean, Kelly, Saklofske, & Furnham, 1992; Dean, 1996).

⁴The glove/balloon analogy is taken, with modifications, from the late Australian philosopher D. C. Stove.

especially of course in what the paper did not say. The Freudian analysts emphasized that their theories were constantly verified by their "clinical observations" (Popper, cited by Magee, 1975, p. 45).

Of course, even closed systems can alter over time in response to social or political changes and may even increase in complexity as advocates tinker with terms or add new factors or interpretations to keep the system fashionable. But advocates' refusal to confront contrary evidence as contrary evidence makes a prison.

The failings of predicted events to occur or the incomplete fit of a theory to data tell us somewhere in our theoretical network something is wrong or needs modification. As Churchland (1986) pointed out,

How should we make revisions in our theoretical networks? How do we know where to assign blame? Evidently, in scientific practice a variety of considerations enter: if a hypothesis already explains a good deal and there is no other theory with which to replace it, scientists are reluctant to see it as the part to revise. If revising one deep feature in the theoretical network entails massive revision elsewhere, one is more likely to revise something else. Considerations of simplicity, unity of theory, success of existing theory, availability of a replacing theory, and so forth, make important contributions to a decision concerning what to alter given the predictive failure (p. 263).

The problem becomes a far different one in the case of astrology because plausible, alternative conceptions of human behavior in the social and biological sciences are present. Moreover, with astrology the use of endless self-serving rationalizations for failure have eliminated any need to revise the theory, except for minor alterations to keep it fashionable with the times. The excuses are rarely independently tested or followed up; they are simply facily accepted by astrologers as valid.

The claim that astrology is a closed system is strongly supported when considered in conjunction with the following observations: no plausible explanation is available for astrological claims (Dean, Loftson, & Kelly, 1996); research studies on traditional astrology are mostly negative, and the positive results are not commensurate with the claims of astrologers. The result has been a rejection of experimental investigations of astrology and a turn to a more mystical or psychological approach (utilizing a more complex interpretation of astrological symbolism) wherein disconfirming outcomes are more easily covered up (Dean, Mather, & Kelly, 1996). Even though they believe astrology works, most astrologers have no training in how to test or investigate even the most basic astrological claims (Dean & Mather, 1996). Although astrologers claim their theory is based on centuries of refined observation, there is much reason to believe the contrary, namely, that astrological beliefs are armchair speculation based on analogies (Stewart, 1996; Kelly, 1997). Finally, there are many nonastrological reasons why horoscopes seem to be accurate, none of which require astrology to provide genuinely inde-

pendent information. Many of these consist of psychological biases, with which astrologers reach conclusions that were already present as preconceptions (Dean, *et al.*, 1992; Dean, *in press*).

THE BASICS OF ASTROLOGY

The basic premise of astrology is "as above, so below"; the heavens mirror what happens on earth. Different forms of astrology describe the actual relationship in conflicting ways. But the staple idea of astrology is that the underlying essence symbolized by the heavens is invariably correct, but the manifestation of this symbolism is varied.

For our purposes, we can describe two basic forms of astrology, one outward, the other inner. The first is its traditional form, in which the emphasis is on prediction, observable outward behavior and concomitant inner emotions and feelings. The second is its modern psychological form (also known as astropsychology and archetype psychology), wherein prediction and behavior are eschewed in favor of inner unobservables.⁵

Astrologers construct a birth chart (horoscope) which is a stylized earth-centered map of the heavens at the time of a person's birth. This map (in the West) usually includes astrologically significant factors such as planets, the signs of the zodiac, houses, and angles between pairs of planets (aspects). To complicate the picture a large number of other factors can be introduced depending on the system used by the astrologer. But whatever the system, the central principle is that interpretations should not be based on isolated factors but only on a synthesis of the whole chart.

In principle the *meaning* of an isolated factor is not affected by the whole. Suppose planet A in house B means X. It means X regardless of the whole. But planet A is also in sign C, and it may also be in aspect to planets D and E, each with its own associated houses and signs. So X has to be blended with the meanings of these additional factors, just as the colour of a can of paint depends on the various pigments thrown in.

Furthermore, the contacts to planet J may mean something like X, while the contacts to planet K may mean something like not-X. So the colour of our wall depends not just on the pigments in the can but on how many different cans and how much of each. Nevertheless, the meaning of our original planet A in house B is unchanged regardless of the whole, just as the colour of each individual pigment is unchanged regardless of the final colour of our wall.

The problem is that astrologers have not agreed on what paints are rel-

⁵Psychological astrology is tied in with depth psychology and relates psychological needs and defenses with positions of the planets in the birth chart. Prominent psychological astrologers are Liz Greene (1996), Stephen Arroyo (1993), and Glenn Perry (1995, a, b).

evant to the final colour or how their contributions are to be weighed.⁶ Furthermore, the quality (meaning) of each pigment is based not on actual research but on symbolism and analogies. Thus, when Chiron (a minor planet in orbit between Saturn and Uranus) was discovered, the first thing astrologers did was to turn to their dictionaries of mythology, and thus work out what Chiron meant, the winner being the one with the most convincing mythology and the most poetic descriptions.⁷

Similarly, the merits of various house systems are based on analogy, not on actual research.⁸ Just as there are 12 signs so there are 12 houses. Just as signs divide the ecliptic so houses should also divide the ecliptic. But, exactly *how* it should be divided, i.e., equally, unequally, or whatever, is a matter of ongoing theoretical argument whereas the real issue is what evidence supports which system.⁹ Occasionally an astrologer will emerge with the idea that arguments are better resolved by research rather than by analogies, but since most astrologers ignore or dismiss a negative result unless it suits them,

⁶That is, there is no agreement on what factors should be considered in a birth chart and how they should be combined. One school of astrology will settle for one set of rules and another school for an alternative set. Each school will have features that make it more appealing to one sort of astrologer than another, for example, it might emphasize spirituality more, it might use simpler charts, or it might be less expensive. The astrologer may claim that one system works better than another, but the judgement is always a subjective one, never one based on severe tests, so it may only mean that (unknown to the prospective student) the preferred system allowed more generality, more flexibility, or more nonfalsifiability rather than one that has been shown to provide more reliable information than provided by competing astrological systems.

⁷Chiron, the first centaur, is associated in mythology as "the wounded healer." Consequently, the position of Chiron in the birth chart represents the area in which a person is literally or symbolically wounded (O'Brien, 1997). However, the astrologer O'Brien suggests that a complete exegesis of Chiron's role in astrological interpretation should also take into account "the celestial location and orbit of Chiron" and "modern cultural concepts contemporary of the time of Chiron's discovery" (p. 50). The meaning of Chiron for all people on the globe is thus underlain on the basis of a parochial ancient myth, along with alleged magical properties that somehow inhere in (Western?) culture at the time of its discovery. These claims are not sullied by the collection and collation of data but are founded entirely on armchair speculation regarding magical associations (see Dean, *et al.*, 1996, for a critique of magical explanations in astrology).

⁸Analogical and metaphorical thinking is important in science, as in all disciplines. For example, consider the early Dalton view that atoms were analogous to piles of shot, the Rutherford comparison of the atom and the solar system, the mechanical model of billiard balls and gas molecules, Piaget's view of biological and cognitive systems as cybernetic systems, and the cognitive psychological view of the mind as a representational system. In all the above cases the analogies facilitated prediction and led to testable explanations of new sets of facts, even when the analogy itself turned out to be flawed. Thus atoms are not really like billiard balls. In contrast, analogies in astrology lead nowhere. They have not led to the discovery of new facts which they then help to explain. Despite its modern revival, astrology has had no appreciable impact in any field of science, nor has it persuaded scientists to reconsider their theories and methods.

⁹Astrologers contend that knowing the correct names of the planets provides insights into the welfare of human beings. Disputes among astrologers, therefore, usually center on finding the most appropriate myths that match the names of the planets. A case in point involves the discussion by astrologers over a study (which lacked a control/comparison group) by Tarnas (1995) who concluded that the myth of Prometheus better described the essence of the planet Uranus than the Uranus/Ouranos myths. The astrologer, Chandler (1996) challenged the ac-

the analogy based inconsistencies among contending astrological factions continues unabated.¹⁰

And so it is throughout astrology: Lectures, conferences, and entire books are judged not by empirical evidence but by the beauty and insight of the symbolism. But such symbolism can vary widely across schools of astrology, both culturally and historically, which is why Culver and Ianna (1988) describe astrologers as exhibiting the "Gemini Syndrome," behavior involving the confident use of glaring inconsistencies.

THE ASTROLOGICAL CLOSED SYSTEM

The sociologist Wedow (1976) made tape recordings of counselling sessions with eight astrologers and their clients and found that wrong statements made about the client were never blamed on astrology. Two general groups of excuses for errors were found by Wedow. The first shifts the blame from astrology to the participants (clients do not know themselves, astrologers are not infallible). The second put the blame on the ambiguity of birth charts (an overlooked factor is responsible, the manifestation is atypical).

Group I: Blame-the-participants Set of Excuses

Astrologers have appealed to the same excuses for centuries (see Table 1). If we consider Wedow's first source of fault for astrologers' errors in predictions and readings, we can find many modern versions. The poor reading may be due to the inadequacy of the astrologer. Perry (1995b), a psychotherapist and prominent American astrologer, tells us "... there are many different types of astrologers, not all of whom have the same ability" (p. 125). To be sure, there are inadequate astrologers just as there are inadequate policemen, lawyers, and dentists. But are such astrologers inadequate

count provided by Tarnas by arguing that the names of the planets were magically and synchronously chosen for all time, and should therefore be inviolate: "Surely the names assigned the new planets [Uranus, Neptune, and Pluto] are something given to us once and for all, unalterable like an omen?" (p. 10). In defense of Tarnas, Goddard (1996) responded that new astrological insights can be fleshed out by investigations like that conducted by Tarnas in conjunction with an examination of other myths. According to Goddard, *whatever* the planet Uranus was called would synchronously have given us astrological insight: "... we could have avoided the whole question [over the most appropriate mythology for Uranus] ... by just settling for the name Herschel in the first place! ... But ... choosing the prosaic name Herschel with such a motive in mind would have been significant too! ... And the fact that he was an amateur (though distinguished in another field) and did not belong to the professional elite would have been a further synchronicity! We just can't escape it" (p. 166). Astrology is thus hermetically preserved.

¹⁰In fact, some astrologers hold that the greatest thing since Ptolemy is *Project Hindsight*, established in the United States in 1993 to translate the ancient literature of astrology from its original Latin, Greek, Hebrew, and Arabic into modern English. The argument: Existing works in English are just fragments, so to know what really went on we have to examine the bits that are missing. Once we know this, advocates add apocalyptically, then astrology will be restored to its true position as the Grand Narrative of everything. It is as if a school of chemistry wished to overthrow the evidence favouring orbital theories of valency by appeals to Aristotle.

TABLE 1
ASTROLOGERS' EXCUSES FOR FAILINGS OF ASTROLOGY

Group 1: Blame-the-participants Set of Excuses
1. Some astrologers are worse than others.
2. The astrologer is only human and not infallible.
3. The client lacks self-knowledge.
4. Errors can be made in the astronomical calculations.
Group 2: The Birth-chart-ambiguity Set of Excuses
5. The number of factors increases difficulty in interpretation of horoscope.
6. Astrological factor(s) can be overlooked.
7. Astrological symbolism is itself inherently ambiguous.
8. The interpretation can be taken literally or symbolically.
9. The stars incline, not compel.
10. The meaning of astrological symbolism may change over time for a person.
11. Psychological factors, e.g., client self-insight, maturity, psychological integration, unconscious processes, etc., can modify how the chart is expressed in behavior.
12. Biological, e.g., age, sex, or sociological factors, e.g., socioeconomic status, culture of origin, spirit of the age, can modify how the chart is manifested in behavior.
13. Unforeseen/chance/chaotic events in the environment complicate interpretations from the birth chart.

because of lack of astrological skill or because of a lack of other personal qualities, e.g., empathy, listening skills, etc.? As Dean (1991) points out:

...an exposition by a good astrologer on the special problems faced by Neptune in each house, or how to live with a T-square or a void-off-course moon, or a splash pattern, or a heavy fifth harmonic, will contain beneath the jargon a sensible and insightful commentary on human behavior that any caring person of rich experience could deliver (p. 284).

Similarly, the astrologer Ashmun contends, "any good I've done as a consultant, and I have done some good, has less to do with my being a good astrologer than my being a good person" (1984, p. 4). But when things go wrong it is easier to blame the astrologer than astrology. And astrologers remind us that they are not infallible,

Whatever meaning I might give to a particular [astrological] aspect, I can be sure that it is incomplete, for when the whole story is known I invariably discover that the way that aspect played out in the person's life was particular to that person in ways I could never have imagined (Perry, 1993, p. 6).

However, the astrologer's faith in astrology never waivers: "This is not to say that I was wrong, only that my interpretation was a limited, approximate description of a much larger truth" (Perry, 1993, p. 6).

The source of the problem may be deflected to lack of self-knowledge in the client. The psychological astrologer contends that the cosmos reflects the human psyche, so its manifestation may be unconscious: "If it is unconscious, it is not subjectively observable or knowable via introspection until and unless the individual attains the requisite level of awareness" (Perry,

1995a, p. 35), which leaves the client in no position to disagree with what the astrologer says,¹¹ who thus loses the opportunity to modify and improve his theories. Also, if the client behaves in ways at variance to that expected from astrological theory, the astrologer can 'explain away' this discrepancy by appealing to psychological variables:

there are so many ways that people can overcompensate, repress, project, deny, and otherwise express in distorted ways what is indicated in their charts . . . Consider, for example, the distribution of planets in elements. When a Jungian astrologer examines the distribution of planets in the four elements she is likely to conclude that if a person has no planets in a given element, then that element would be his 'inferior function,' e.g., if a person had no planets in earth, 'sensation' would be his inferior function. While this *may* be true, it is quite common to find individuals who *overcompensate* for their inferior function and actually end up expressing that function in an exaggerated way. I have seen numerous instances where a client with no planets in earth ends up as a massage therapist who *overidentifies* with her body and endlessly advocates the need for enjoying and taking care of it (Perry, 1995b, p. 124).

Similarly, Perry (1997a) said,

. . . individuals with Venus square Pluto are distrustful of love and lend to become involved in relationships that have a high potential for negative consequences. Yet, if some members . . . have grown from these experiences and have healed themselves with respect to their relationship patterns, then their response to the test is not going to confirm the experimenter's hypothesis—not because the hypothesis is wrong, but because human beings are historical rather than static in character. That is, they evolve over time. Members of the experimental groups will still behave in a manner that is characteristic of Venus square Pluto, but the meaning of the aspect changes in accordance with the integration attained. Such individuals may display a capacity for tender vulnerability, for courageous disclosure of their wounds and pain, for passionate sexuality, and for a level of intimacy that is regenerative for both parties (p. 55).

Whatever behavior the client exhibits can thereby be made consistent with astrology by introducing psychological variables in the servitude of astrology.¹²

Group 2: The Birth-chart-ambiguity Set of Excuses

Wedow's second category provides an additional reserve of ways to

¹¹In any case, clients of astrologers tend to be uncritical, so it is unlikely that they would openly challenge a reading. While the astrologer Dwyer (1986, p. 99) stated that "clients are incredibly gullible . . . and will accept anything provided we deliver it as if we knew what we were doing," Nolle, the author of *Interpreting Astrology* (1986, p. 83) commented "Most people who come to an astrologer want the astrologer to succeed in reading their charts. They are, therefore, generally sympathetic and cooperative."

¹²This awkward overriding of astrology by psychology is ingeniously explained by some astrologers by stipulating that psychology is a branch of astrology. Hence, "All working psychological models can be subsumed into astrological language . . ." (Idemon, 1988, p. 7) and "psychology should become a branch of astrology! While all of psychology may fit into astrology, not all of astrology fits into psychology" (Perry, 1988, p. 9). While basic assumptions are questioned and replaced in psychology, the basic tenets of astrology don't need to change, only the interpretation of the referents of the astrological symbolism are modified to be in accord with prevailing fashion (e.g., the 'alliance' with Jungian psychodynamic theory being the contemporary vogue). It is comparable to continually recycling clothing, the clothing remains, the only change is in the bodies which fill them.

"explain away" failures and difficulties. To start with, astrologers remind us that astrological symbolism can manifest in a great variety of ways. As Perry (1994) said "the inherent ambiguity in chart symbols makes research extremely difficult" (p. 35). Also, Perry (1995a), "[Astrology] can predict process [underlying psychic structure] but the outcome that conforms to the meaning of the process can take many and varied forms" (p. 35). The underlying essence symbolized by the heavens is stable, but it can be expressed in an almost infinite set of manifestations. For example, Charles Harvey (1995), a longtime president of the Astrological Association of Great Britain, said, "Uranus in hard aspect with the midpoint of Sun and Moon may produce a Napoleon or Hitler, but equally it may produce a Margaret Thatcher, a Spike Milligan, [or] a Martin Luther . . ." (p. 52). If we could find commonalities among this diverse group of individuals, it would not be unreasonable to expect to find shared attributes among any group of people.¹³ Furthermore, it is not made clear how the "many and varied forms" are delimited for these astrological factors.

If the client does not exhibit the appropriate tendencies or qualities, then astrology can be 'confirmed' if someone else in the family or workplace has them: "If an astrological factor is not observable in an individual's behavior, then that factor will tend to show up in the individual's environmental relations . . . relations between husbands and wives, employers and employees, parents and children . . ." (Perry, 1995a, p. 38). He gave the following example:

I once had a female client with Sun, Mercury and Venus in Aries, yet she also had Mars square Neptune and thus was not consciously aware of her aggressive impulses . . . Yet this woman married someone who was selfish, egocentric, and aggressive. She projected her Mars onto her husband who carried it for her with a vengeance (Perry, 1995a, p. 35).

Since the astrologer knows that astrology can't be wrong and finds the client does not exhibit the expected behavior, the conundrum is solved by checking out the client's relationships until 'confirmation' is obtained.

Cornelius, Hyde, and Webster, authors of *Astrology for Beginners* (1995), pointed out that how one should interpret the astrological symbolism depends on what we already know about the person: "Use whatever you know about the person to flesh out the symbolism" (p. 93). Cornelius, *et al.*

¹³Harvey (1995) stated that these individuals do have an underlying set of qualities in common, namely, "Each of these cases is a fairly clear example of the autocratic, independent and revolutionary qualities associated with the Uranian archetype" (p. 53). Of course, these perceived commonalities are found AFTER already knowing the people in question exhibited the relevant planetary configuration. Perry (1995a) says, "While it is usually obvious in retrospect that the actual condition reflects the essential nature of the [astrological symbolism] involved, it is extremely difficult to predict exactly where and how the [astrological symbolism] will appear" (p. 35). As Levy (1997) reminded us, we can all pick winners after the race is finished.

(1995) told us, "both Freud and Thatcher have Ascendant Scorpio with its ruler Mars in Libra in the 11th house" (p. 100). But "Mars can [represent] sex or war, and the 11th [house] can [represent] friends, politics or ideals, depending on the context," so Freud's Mars in the 11th house "creates sexual theory, whereas Thatcher's represents political action and war" (p. 100). Since astrological symbolism can even represent "things [people] stand for or have created" (Cornelius, *et al.*, 1995, p. 16), astrologers can easily fit anything after the fact.¹⁴ Consider how Cornelius, *et al.* (1995) dealt with Karl Marx:

Karl Marx was born a few hours before a Solar Eclipse in Taurus, the 2nd sign, and the eclipse factors are in a conjunction in his 2nd house (Dragon's Head, Moon, Sun). At the personal level, this could be problems with earnings (2nd, Taurus), or a need to find new values (New Moon in 2nd) in his life. But who cares? Look at the symbolism of TAURUS, the Bull = CAPITAL. Capital and cattle are from the same Latin root caput—head (=head of cattle). Latin pecus for cattle also gives us pecuniary. Fee is from Gothic faihi, cattle. Now we see the association of Taurus the Bull with cash, economics and "value." So the eclipse in Taurus is the eclipsing of Capitalism and Marx's great work, DAS KAPITAL (pp. 116-117).

Here even the etymology of words is used in *post hoc* fashion to complement and complete an astrological reading. That this would not apply to the many other individuals sharing Marx's chart (time and location of birth) is, of course, never mentioned.

Perceptive astrologers have noticed the compatibility of astrological claims with all outcomes and have become critical of astrological practice:

¹⁴Most astrology books, and tabloid television shows on astrology, contain descriptions of famous individuals and their birth charts along with a commentary on the 'excellent fit' between the two. For example, the astrologers Cornelius, Hyde, and Webster in their popular book, *Astrology for Beginners* (1995), provide examples of correspondences between the horoscopes of Marlon Brando, Princess Diana, Sigmund Freud, Jules Verne, and so on and their lives. Several problems present themselves with this after-the-fact matching. For one thing, they are not done blind. The astrologers already know a great deal about the individual(s) of whom they are preparing the birth charts. If the astrologer knows that someone died of a suicidal depression at the age of 42, he might reinterpret any astrological indications of a long, happy life. Also, given the flexibility of interpretation described in this article, such correspondences between birth chart and life events fail to impress. Perfect fits can be easily obtained using the wrong birth date. Niehenke (1983), a German astrologer, mentions that "I saw three different horoscopes for John Lennon (based on three different birth times) all three indicating 'definitely' Lennon's sudden death" (p. 37). Similarly, Hamblin (1982) wrote in *The Astrological Journal* that he sent a horoscope to a client who reported that "it was absolutely wonderful—all completely true and very helpful" (p. 156) but one year out on birth date! Nienhenke (1983) reports, "One of my clients had consulted 4 other astrologers before she came to me. She judged my interpretations as the most adequate of all, and showed me for comparison the work of my colleagues. I thus realized that I had made an error of 20 years on her birth date" (p. 37). Although astrologers are quite adroit at fitting birth charts to the known past, the future is enigmatic. Cornelius, *et al.* (1995, p. 113) remarked, that given free will and the uncertainties of interpretation, astrology can 'predict' but "the astrologer never knows for sure *when* and in *what way* it will predict." This loose notion of 'prediction' is christened 'archetypal prediction' by astrologers (Tarnas, 1995). While couched in astrological jargon, the end result of archetypal prediction seems indistinguishable in practice from guessing.

If I find a very meek and unaggressive person with five planets in Aries, this does not cause me to doubt that Aries means aggression. I may be able to point to his Pisces Ascendant, or to his Sun conjunct Saturn, or to his ruler in the twelfth house; and, if none of these alibis are available, I can simply say that he has not yet fulfilled his Aries potential. Or I can argue (as I have heard argued) that, if a person has an *excess* of planets in a particular sign, he will tend to suppress the characteristics of the sign because he is scared that, if he reveals them, he will carry them to excess. But if on the next day I meet a very aggressive person who also has five planets in Aries, I will change my tune: I will say that he *had* to be like that because of his planets in Aries (Hamblin, 1982, p. 152).¹⁵

If all outcomes are ultimately in accordance with astrological theory, the claim that the meaning of astrological factors were based on skillful observation by the ancients becomes untenable. How could they have distinguished the meanings of factors from each other on the basis of observed behavior if similar behavior can be consistent with different factors?

The above quote from Hamblin, a past chairman of the Astrological Association of Great Britain, points out another version of the ambiguity appealed to by astrologers, namely, that a chart factor was overlooked. Given the number of possible combinations in a typical birth chart, and the restricted number actually used by an astrologer, it is always possible to find a missing factor that can be used to evade any discrepancy. But this does not seem to worry most astrologers:

As soon as we put a planet in Aries, place the planet in a house and put it in aspect to another planet, we compound the number of variables exponentially. It should not be surprising, then, when astrologers come up with different interpretations for the same combination of variables. The complexity of the problem dictates that the astrologer be creative in his or her interpretation (Perry, 1993, p. 7).

So disagreements among astrologers can be explained away in terms of numbers of factors, inherent complexity, differing techniques, or appeal to the lack of creativity regarding one or more of the astrologers under consideration. This strategy is made even easier by the addition of chart qualifications such as biological factors, cultural factors, and environmental factors. As Perry (1997a) tells us, each element in the birth chart "has many possible meanings depending on a person's age, maturity, gender . . . that can effect how the symbols of the chart actually manifest in observable behavior" (p. 51). Note that appeals to biological and cultural factors allow all sorts of be-

¹⁵The astrologer Patterson (1993) is also critical of much current astrological practice and points out the circularity here, namely, that *whatever* happens will be deemed consistent with the astrological symbolism. Perry's (1993, 1996) response to this is to deflect the issue in another direction. He maintains the horoscope does not tell us *what* will happen to a person, but *why* it is happening (because of the psychological drives and desires in the inner life of the person, reflected in the heavens). Perry's response begs the question by assuming the issue under debate, namely, that the meaning of the astrological symbolism accurately describes what is going on in a person. Perry's response is like responding to someone who asks "Do ghosts exist?" with "Well, they're all around us, aren't they?"

haviors, attitudes and dispositions that are inconsistent with astrological symbolism to be rendered 'consistent' with astrology. All things considered, it is no surprise that one can easily fit any chart to any client, see Fig. 1 for an example.

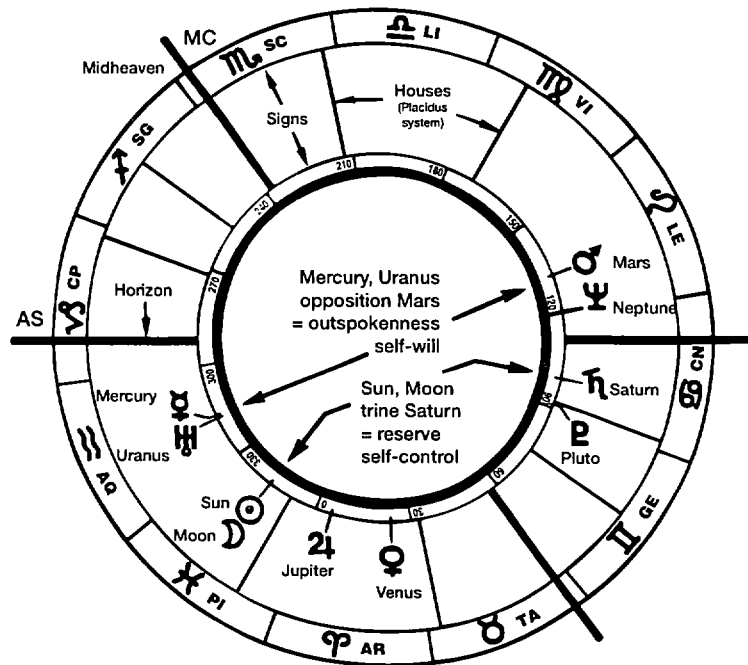


FIG. 1. A test of traditional astrology. This birth chart shows the heavens at the moment of birth of Britain's eminent psychologist Professor Hans Eysenck, born 4 March 1916 at 4 am GMT in Berlin (data from birth certificate). Eysenck is described by his biographer as having a quiet, soft-spoken personal manner that is nothing like his public image of extreme tough-mindedness. This difference makes him a good test subject. His birth chart has a Pisces Sun and Moon, a Capricorn ascendant, and is dominated by the two configurations detailed in the centre. The upper one is a close conjunction between Mercury and Uranus that is opposed to Mars, indicating outspokenness and self-will. The lower one is an unusually exact (to the minute) conjunction between the Sun and Moon that is trine to Saturn, indicating reserve and self-control. At first sight this appears to be an uncanny match to the contrasting public and personal sides mentioned by Eysenck's biographer. However, if as a control we take the exactly opposite personality, namely, loud, outgoing, easily upset, submissive and lacking in confidence, an inspection of astrology textbooks indicates that the first three traits are exactly matched by the upper configuration, and the rest by the lower configuration, especially as the Sun and Moon are in Pisces, indicating sensitivity and passivity. Therefore, Eysenck's horoscope reveals little about the validity of traditional astrology other than its ability to describe almost anything in retrospect. Nor are there any planets in the Gauquelin areas just past the AS and MC in a clockwise direction (adapted from Nias & Dean, 1986, pp. 369-370).

How Astrologers Deal With Negative Studies: Ignore or Reject Them

The failures of astrological predictions when they are specific, rather than the more commonly vague or ambiguous, are legion (Dean, 1991, pp. 282-3). The excuse ascribed to by astrologers has traditionally been "the stars incline, not compel." The modern version of this (as covered by Wedow) is that the same celestial configurations can be expressed in many different ways by different people, and even in different ways by the same person over time, so that astrologers can only guess actual outcomes. But these shortcomings are not considered indicative of deficiencies in the theory of astrology. Consequently, a main problem with astrology then¹⁶ is that errors, discrepancies and failures are rarely perceived as due to the possible unreliability of astrology itself or the lack of credibility of central elements of astrology. It is very unlikely that one will read in astrological journals that recent studies by astrologers have found that "Venus adds nothing to the birth chart" or that "Saturn square sun has been determined to be unrelated to human affairs." Rather, any problems encountered in practice are *always* considered due to the fallibility of the participants, the ambiguity of the birth chart, and the effects of biological and cultural factors.

As an example, let us consider a study conducted by McGrew and McFall (1990, 1992). This study is noteworthy because it involved collaboration with astrologers of the Indiana Federation of Astrologers (IFA) in both the design and conduct of the study and was specifically designed to accommodate objections to the earlier Carlson (1985) study. The participating astrologers agreed that the study was an appropriate test of astrology, but changed their minds when the results were negative.

The study involved matching birth charts to comprehensive case files, specified by the astrologers, which included photographs. The case files were of 23 American-born individuals aged 30-32 years. The findings were that the mean accuracy of the astrologers was very low, and there was little agreement among them, even though they purported to be using the same astrological systems and methods. The participating astrologers remained confident throughout the study in their powers, and the negative findings had no effect on their belief in astrology.

The secretary of the IFA (Mull, 1986), a participant in the study, quickly responded in an astrological journal to explain away the negative results. One of her excuses was that a search of the case files and birth charts indicated that in many cases the appropriate astrological factors were missed and not taken into account by the astrologers. However, astrologers are

¹⁶For many other deficiencies with the theory of astrology see Eysenck and Nias (1982), Culver and Ianna (1988), Crowe (1990), Dean, *et al.*, (1996), and Kelly (1997).

taught to base judgements on the whole chart and not on isolated factors like these, so this argument would seem to be irrelevant.

Her main *post hoc* objection was that the study involved 30-year-old individuals, who “simply had not lived long enough to know themselves” (Mull, 1986, p. 51). However, the IFA had previously specified 30 years as acceptable and astrologers do not refuse clients if 30 years or under. It should also be noted that personality tests are routinely validated without difficulty on student populations aged 20 or less, and that the Ptolemaic tradition on which much of current astrology is based was established when the average life expectancy was around 28 years.

A further objection to the study by Mull was that the case studies were of people who were born close to a Saturn-Neptune conjunction which, “of course, produced many ‘lost souls’” (1986, p. 51). However, the orb¹⁷ reached 15°, well beyond the usual limit of 5°, and the interpretation could equally well be ‘*not*-lost souls,’ depending on which planet is considered the stronger.

Finally, Mull (1986) declared that,

astrology works in the same way that medicine, jurisprudence and the ministry work. That is, there is a body of principles and laws at the core of astrology, but these must be in the hands of a skilled and experienced astrologer who exercises capable judgement for good results. Like medicine, the law, and theology, astrology may not always give quantifiable results—but it works nonetheless (p. 52).

From this statement, one might well conclude that the *peer selected* IFA astrologers were unskilled, inexperienced, and incapable of good judgement, yet somehow the IFA still knows that astrology works. Furthermore, the disciplines astrology is compared with are not particularly well chosen. Medicine is buttressed by a large uncontested biological base and replicated studies of the kind that the astrologers had failed. It is less clear what the comparison of ‘astrology works’ to ‘the law works’ and ‘theology works’ means. Legal laws constitute restrictions placed on its citizens by a society, along with types of punishment deemed appropriate for transgressing these laws. The Law, unlike astrology, does not make sweeping scientific or metaphysical claims about the nature of human beings or the universe. Theology does make metaphysical claims, but religious believers don’t make it out to be a science, an art, or both, as astrology is claimed to be, depending on which astrologer you approach. As Chapman (1996; see also, Dawkins, 1995) pointed out:

Religion, indeed, comes clean and accepts that it stands on faith which is known solely by spiritual criteria to those who are touched by it. Religious truths cannot be proved by a Q.E.D., be

¹⁷An orb is the degree of inexactness of the aspect between two planets, in this case Saturn and Neptune.

they Christian or those of any other faith. Astrology, on the other hand, cannot make up its mind. Some of its devotees try to convince us that they practice a science with some sort of modern physical basis, while others prefer to shroud their doings in a quasi-occult mystique and go on about New Age ideas or alternative therapies. All of them, however, still use the geocentric cosmology, while pretending to do something else. In short, astrology possesses all the coherence of a disorderly assembly, yet it still cries to be taken seriously (p. 41).¹⁸

Another response to the McGrew and McFall (1990) study was from astrologer Dennis Elwell (1991, p. 10) who declared that "the experiment was flawed from the beginning." The proffered reason was that the newspaper advertisement requesting participants offered free personality and vocational testing, so he surmises that they "had one thing in common—they were all in the dark about their personality and aptitudes . . . (not) the right group . . . to take part in an experiment that depended in large measure on self-understanding" (p. 10). However, as McGrew and McFall (1992) pointed out,

Elwell's argument is invalid. It requires no self-understanding to answer questions about hobbies, school grades, jobs, parents, death dates, religious beliefs, height, weight, hair colour, and so on. Nor does it require self-understanding to answer the personality inventories used, which specifically address behavior (do you like going to parties?) precisely to avoid the problems associated with introspection. Nor have the many studies involving volunteers recruited by ads revealed any problems along the lines claimed by Elwell (p. 10).

I also respond to some general views from the astrological community that are relevant to the McGrew and McFall study. Perry (1997a) argued that matching tests are inappropriate for examining astrology. He said that behavior cannot be predicted from the birth chart alone, since this assumes that astrological factors have static, fixed meanings: "if the interpretation of the chart has been rendered without the person being present, then it has been approached deterministically" (Perry, 1997a, p. 51). This didn't stop Perry (1993) from giving astrological interpretations of the character and past actions of Ralph Nader, Richard Nixon, Saddam Hussein, Martin Luther, and Jim Jones, all of whom presumably have not been his clients. If anything, the extensive first hand case histories provided in the McGrew and McFall study should be a firmer basis for matching than biographical information. If one needs the person in front of them, *and* an extensive background knowledge base of the person (level of maturity, level of psychological integration, past experiences, etc.) to interpret a client's birth chart adequately, one can forgive people for wondering just what astrology adds to what a perceptive person or counselor would do with the same information.

¹⁸The pot-pourri of conflicting astrological orientations ranging from those with scientific pretensions through spiritual guides are briefly described in Cornelius, *et al.* (1995). No wonder the astrologer Dobyns (Dobyns & Roof, 1983) could bemoan, "[A]strology is almost as confused as the earthly chaos it is supposed to clarify" (p. 4). Her characterization of astrology is as applicable today, if not more so, than when it was written, almost two decades ago.

Another general objection is that quantitative studies are tangential to test astrology proper. Perry (1997a) stated such studies examine isolated factors and not the whole chart and ignore the fact that astrological factors have many meanings depending on the age, maturity, gender, etc. of the person.¹⁹ However, Perry seems to want it both ways—to disregard the negative evidence produced by quantitative research (“such efforts are unlikely to succeed for the simple reason that personality cannot be reduced to isolated parts of a horoscope. When the majority of these flawed designs fail, as they inevitably do, we should not conclude that astrology itself lacks validity,” p. 46), but he also wants to keep the few positive results (on Gauque-lin’s findings): “Apparently certain planets are so powerful when rising or culminating that in some cases there is a definite statistically measurable correlation” (1997a, p. 46). The astrologers’ approach to research can be summarized as, “Positive studies support astrology regardless of quality, but negative studies are always incorrectly conducted” (see also, Kelly, 1997, pp. 1039-1042).

Conclusion

In this article it has been argued that astrology, as presently practiced, does not provide astrologers with any privileged access to an understanding of human beings. Many people appear to be attracted to astrology because it seems simple and speaks to their lives—“He’s a Scorpio, that’s why he’s so secretive,” “No wonder he got divorced, he has Sun Square Mars in his chart,” etc. However, a closer look shows that astrological statements and claims cannot be taken at face value. Not all Scorpions are secretive, and people can be found with Sun Square Mars who are happily married. Astrologers therefore have to qualify such factors continually. From the assumption “everything affects everything else in the chart” onwards, the reading progressively becomes an *ad hoc* case-by-case intuitive exposition. With additional nonastrological qualifications, e.g., age, sex, unpredictable environmental

¹⁹Perry’s antipathy to quantitative research is not shared by all astrologers. See Davis (1985) and Klein (1985) for a contrasting view. Perry (1997b) argued that qualitative research is the most appropriate way to investigate astrology because it allows for “the complexity, ambiguity, and multi-dimensionality inherent in astrology” (p. 49). But, contra Perry, astrology (at least in its present psychological forms) is unamenable to any kind of research. The purposes of research are to sift out supported from unsupported parts of a theory, to examine the viability of extending a theory into new domains, and so on, none of which can be accomplished unless we are cognizant of what it would be for the system to fail in these endeavors. Unless the real possibility of uncovering results incongruent with the theory under investigation is allowed, the conclusions will inevitably confirm the preconceptions, leading advocates to believe the preconceptions are proven theses. Given the two golden rules of psychological astrology, *viz.*, the whole predominates over the part(s) and isolated factors can be manifest in a multitude of ways (in conjunction with the other alibis mentioned in this article), any failure is masked in advance, and questions of method are therefore moot. In this situation, research would not increase our understanding of astrological matters; there is no reason to conduct research in the first place unless it can prompt one to rethink one’s initial position.

factors, client maturity, self-insight and other psychological considerations, etc., the astrological contribution (especially in psychological astrology) becomes qualified into unconstruability.

While the astrological neophyte may believe that he is learning a powerful and elegant system with technical jargon, in fact, they are acquiring a secular theology. They simultaneously learn the techniques of astrology along with a corpus of excuses (acquired through reading astrology books and magazines, or talking to other astrologers) to mask errors in readings and acquire standard responses to criticisms of astrology.

A problem with unassailable systems is that with sufficient ingenuity, essentially an infinite number of closed systems can be constructed that 'explain' everything that has happened equally well (cf. Palmistry, pop psychology). Closed systems are also not improvable or capable of progress. A major way we learn is from identifying and correcting our errors. Where error is precluded in advance, we cannot reach reliable, informative conclusions about ourselves or our world (Mayo, 1996). Rather, such closed systems only change to suit cultural fashion. As we have seen, the way the majority of astrologers practice astrology, no matter what the birth chart says, a little ingenuity in searching either the horoscope, the life context of the client, or an appeal to psychological variables, will avoid the need to reevaluate the theory itself. The result of faith in such an insular system is an unwillingness to consider fallibility in the system. Hence, Pottenger (1994), a firm believer in astrology, stated that:

To change my mind [about astrology] would require an ironclad, irrefutable proof that materialism is a completely correct description of reality, followed by a proof that physical science has fully described all forces and interactions possible in that material reality and that none of these forces could let planetary motions affect individuals on earth (p. 37).

Pottenger is immoderately telling us that only an omniscient rival theory will cause him to have serious doubts about astrology. By appearing to be rigorous, Pottenger structures the argument so that he can never be disproven.

The use of the same self-serving manoeuvrings from the two areas described in this article could be employed to shield an astrological theory with exactly the opposite doctrines as Western astrology. For example, Davidson (1963/1987) stated the sun "represents will power, vitality, leadership, creativity . . ." (p. 29) and Mars symbolizes "... passion, desire, energy, assertiveness, courage, initiative" (p. 31). And, Pluto "represents the underworld of man's consciousness, those elements in his nature that have not been redeemed and integrated with the rest of his being" (p. 33). (Other astrologers would identify the meaning of the planetary symbolism with archetypes and psychological needs.) The point here is we could randomly shuffle the associations around and give Mars the descriptions that Pluto presently has and so on, and astrologers would proceed with no means to distinguish

the spurious system from the genuine brand. Given all the variables that could modify any interpretation from the birth chart, and the great deal of latitude in which the birth chart may be manifested in behavior, how could any astrologer fail to fashion correspondences congruent with the 'new' theory? Any 'recalcitrant' client behaviors could be rationalized as due to the "complexity, ambiguity, and multidimensionality" of the 'new' astrology (and inevitably consistent with the underlying new symbolism) and, therefore, need never be acknowledged as evidence of deficiencies in the system. As MacIntyre (1994) pointed out,

If a standpoint is not able to be shown, by its own standards, to be discordant with reality, it cannot be shown to be concordant either. It becomes a scheme of thought within which those who give it their allegiance become imprisoned and also protected from the realities about which their beliefs were originally formulated (p. 144).

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